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National Commission on COVID-19 and Criminal Justice

# COVID-19 and the Changing Landscape of Substance Use Disorder Treatment

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# Highlights

- + The coronavirus pandemic arrived at a time when the United States was already experiencing an epidemic of opioid use and opioid-related overdose deaths. This epidemic was recognized by the federal government as a public health emergency in 2017, and opioid overdose death was cited as a major factor in the decline in life expectancy between 2015 and 2017.
- While it is too early to draw firm connections, evidence suggests that the isolation, anxiety, economic struggles, and other challenges created by COVID-19 and associated policies negatively impacted people with substance use disorders (SUDs).
  - Temporary closures of treatment centers, reduced capacity, and the transfer of treatment services to telehealth have created barriers for many people in need.
  - A survey of 1,079 individuals with SUDs found that 20% of respondents reported an increase in substance use, 34% reported changes in treatment or recovery support, 14% were unable to access needed services, and 4% reported an overdose.
  - While both non-fatal and fatal overdoses began increasing prior to the emergence of COVID-19, the rate of opioid-related overdoses accelerated during the pandemic.
- + The available research indicates that people with pre-existing opioid use disorders with no recent involvement in treatment, and those who have developed a disorder since the beginning of the pandemic, faced greater barriers to treatment and medication.
- To address the accelerating rate of opioid overdoses, some states are relaxing prescribing requirements for the overdose-reversal medication naloxone, adapting outreach efforts, and using smartphone and web-based forums to provide information on treatment facilities, services, and educational resources.

# Introduction

The coronavirus pandemic has altered the lives of countless individuals worldwide. As of March 2021, more than 2.8 million people across the globe have died; approximately one in five of those deaths occurred in the United States.

In addition to the loss of life, COVID-19 has destroyed businesses, expanded unemployment, closed schools, and curtailed many aspects of normal activity. To reduce the spread of the virus, jurisdictions in the U.S. implemented a variety of stay-at-home or shelter-in-place orders to minimize human contact and opportunities for infection.

While these policies were established with public health in mind, they nevertheless created collateral risks to both health and safety. One area of concern was whether individuals would turn to alcohol and drugs to cope with the fear of catching COVID-19 and the stress and anxiety of isolation from family, friends, and colleagues. Substance use experts also were concerned that COVID-related restrictions would create barriers to new or continuing treatment for those in need.

Since the start of the pandemic initial research has examined whether the policies implemented in response to COVID-19 were associated with any substantive changes in alcohol and drug use. While it is too early to draw firm conclusions, early statistics show a problematic rise. Several studies have reported increases in alcohol sales and consumption and the use of stimulants, as well as a rise in fatal and nonfatal opioid overdoses (Abramson, 2021; Das & Kutscher, 2020; NielsonIQ, 2020; Ochalek et al., 2020; Weerakoon et al., 2021). An examination of medication use revealed an increase in anti-depressant, anti-anxiety, and sleep-aid prescriptions between February and March 2020, the time frame during which COVID-19 was officially declared a pandemic (Express Scripts, 2020). A follow-up analysis found that use of antidepressants increased 8% in 2020 in comparison to 2019; among those taking antidepressants in 2020, one-third were "new" users (no use in prior 180 days) (Evernorth, n.d.).

In addition, a study by the Centers for Disease Control and Prevention (CDC) indicated that of 5,412 adults surveyed between June 24 and June 30, 2020, 13% reported starting or increasing substance use to cope with stress or emotions related to the pandemic (Czeisler et al. 2020). The increase in nonfatal and fatal overdose events during 2020 has been particularly troubling. One study found a large "national surge in overdose-related cardiac arrest during the initial months of the COVID-19 epidemic in the U.S. Peak rates in May 2020 were more than double the baseline from 2018 and 2019, and overall 2020 values were elevated by approximately 50 percent" (Friedman et al., 2020, p.E3).

As federal, state, and local authorities focused their time, attention, and resources on acute pandemic response, less capacity was available to address the ongoing opioid crisis facing the nation. This report examines how access, capacity, and delivery of substance abuse treatment have been affected by the pandemic, with a focus on opioid use disorders and overdoses.

## **COVID-19 and the Impact on Substance Use Disorders**

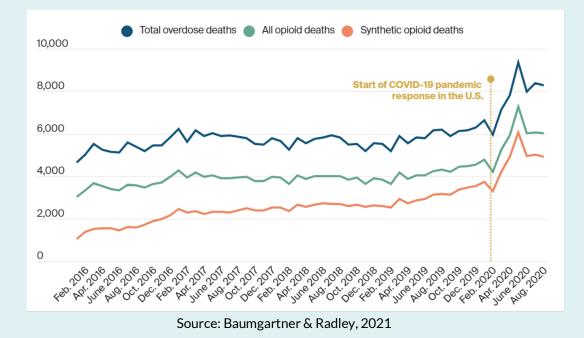
While the pandemic disrupted nearly every facet of life, it came at a time when the nation was already experiencing an epidemic of overdose and death. The opioid epidemic has been recognized by the federal government as a public health emergency since 2017, with opioid overdose death identified as a major factor in the decline in life expectancy between 2015 and 2017 (NPR, 2020). According to the CDC, over 83,000 drug overdose deaths occurred in 2020, the highest ever recorded, with this trend driven largely by synthetic opioids such as fentanyl. Among the 38 U.S. jurisdictions reporting opioid-related overdose fatalities from June 2019 to May 2020, 37 reported an increase and 18 reported an increase larger than 50% (Centers for Disease Control and Prevention, 2020b; Stephenson, 2020; The Crime Report 2020).

While the increase in both non-fatal and fatal overdoses began prior to the emergence of COVID-19, the CDC reports that the rate of opioid-related overdoses accelerated during the pandemic. Specifically, 2020 estimates show an increase in overdose deaths across three drug types (synthetic opioids, cocaine, psychostimulants), with synthetic opioids showing the greatest increase (see Figure 1). Although not all of this increase is directly attributable to the COVID-19 pandemic and associated policy responses, the increases were sizable and occurred throughout the country, especially as shelter-in-place policies started to take hold.

Using data from the CDC, The Commonwealth Fund estimated the number of monthly overdose deaths from January to August 2020; the study showed an increase in overdose deaths, with a notable spike in total overdose deaths in March of 2020 (Figure 1). Threequarters of the overdose deaths in the first few months of the pandemic are attributed to opioids, and of these, 80% included synthetic opioids (excluding methadone), supporting the belief that the increase in overdose deaths is largely driven by fentanyl (Baumgartner & Radley, 2021).

#### FIGURE 1

#### Monthly Drug Overdose Deaths



Communities of color have seen disproportionate numbers of fatal and non-fatal overdoses. For example, while the CDC reported that all racial, ethnic, and age groups experienced an increase in opioid-related fatal overdose events prior to the pandemic, there were more significant increases among Black individuals between 45 and 64 years of age living in large metropolitan areas (Lippold et al., 2019). This disproportionate impact appears to have continued and possibly widened during the pandemic, as communities of color are particularly vulnerable to pre-existing conditions and have less access to healthcare and other critical resources. Research also has confirmed higher rates of fatal and non-fatal opioid overdose events among Black individuals during the pandemic in states like California, Virginia, and Michigan, and in the city of Philadelphia (Kharti et al, 2021; Michigan.gov, 2020; Ochalek et al., 2020; The Crime Report, 2021).

# The Changing Landscape of Substance Use Disorder Treatment

### ACCESS AND CAPACITY PRE-PANDEMIC

The Substance Abuse and Mental Health Services Administration (SAMSHA) reports that in 2018 approximately 20.3 million people age 12 years and older, roughly 7.8% of people over age 12, had a SUD; of those, two million had an opioid use disorder (includes heroin and prescription pain relievers). However, prior to the pandemic, only a small portion of the people needing SUD treatment actually received it. In 2018, only 1.4% of people age 12 years or older received any treatment in the past year and less than 1% received treatment at a specialty facility (Center for Behavioral Health Statistics and Quality, 2019). In addition, as of May 2020, approximately 31% of U.S. counties had no facilities offering any type of SUD treatment (includes outpatient, residential, hospital inpatient facilities that provide detoxification, medication-assisted treatment, and a range of clinical or therapeutic services) (U.S. Government Accountability Office, 2020).

Many factors contribute to the gap between the need and receipt of SUD treatment. These include limited access due to geography, cost, stigma, hesitation in providing certain types of treatment (e.g., buprenorphine), and regulatory barriers (Clark et al., 2021; Hunter et al., 2021; U.S. Government Accountability Office, n.d.; Manz et al., 2020). Access has been a particular challenge in rural areas and within disadvantaged urban Black communities. In regard to Opioid Use Disorders (OUDs), research has shown that between 2016 and 2017 overdose deaths rose 25% among Black people, compared to 11% among White individuals. Furthermore, Black individuals are 77% less likely to be prescribed buprenorphine and more likely to receive methadone treatment, which has stricter treatment requirements (daily in-person appointments), making it harder to successfully manage (Connolly, 2020). Another barrier limiting access to treatment for Black individuals is a lack of insurance due to unemployment or underemployment. The pre-pandemic rate of unemployment among Blacks (6.5%) was approximately twice as high as the rate for Whites (3.1%). The unemployment rate for Hispanic workers was 4.5% and the rate of unemployment for Asian workers was 3.2%, close to that of White workers (Wilson, 2019).

### ACCESS AND CAPACITY DURING THE PANDEMIC

The pandemic has exacerbated treatment access challenges in a variety of ways. Temporary closures, reduced capacity, and a rapid transfer to telehealth (where appropriate) for a range of services associated with detoxification, counseling, and treatment programs have created complications for people in need. For some, this initial contraction in access to, and utilization of, services was temporary. For example, preliminary data from four large New York City hospitals show a more than 50% decline in in-person addiction consults between March and May of 2020 compared to the preceding five months (October 2019-February 2020). While the number of referrals seemed to return to prior rates in June and July 2020, the rates of service provision have not returned to normal for many other providers (Murphy et al., 2021). Social distancing and guarantine protocols have dramatically affected ease of access to treatment, the capacity at which some services can be provided, and the service delivery method. Service providers have imposed limits on the number of people allowed in a facility at one time, adopted new appointment procedures that extend wait times, implemented additional cleaning procedures that consume more staff time, and reduced capacity at residential treatment centers from two people per room to one per room.

Furthermore, interviews with directors of 20 residential SUD treatment programs in California highlight the range of challenges that residential facilities are experiencing. These include delays in treatment initiation, fewer services available to clients in treatment, reduced client retention, and economic barriers to community reentry. Directors also discussed how limited funds for COVID-19 mitigation measures have led to a reduction in client numbers and revenue, compounding an already challenging financial environment for treatment programs. But the directors also attributed several positive effects to the pandemic, including overall operational improvements, the recognition of SUD treatment as an essential service, and the expansion of telehealth services (Pagano et al., 2021).

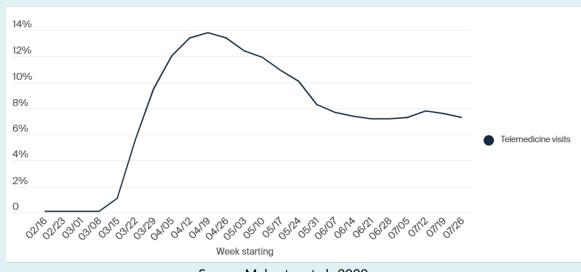
Overall, early evidence indicates that the challenges created by COVID-19 have led to negative impacts on people with SUDs. A survey of 1,079 individuals with an SUD found that 20% of respondents reported an increase in their substance use, 34% reported changes in their treatment or recovery support services, 14% reported being unable to access needed services, and 4% reported an overdose (Husley et al., 2020).

### TELEMEDICINE

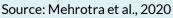
As previously described, the pandemic has dramatically altered the delivery of care as many health care and treatment providers quickly began providing services by telephone, computer, or via smartphone-based support. These forms of medical care, commonly referred to as telemedicine, allow clinicians and patients to interact remotely. Initially developed to improve access for patients, telehealth now represents a vital means of providing medical and health services in a safe, socially distant manner during the COVID-19 pandemic.

The use of telemedicine services greatly increased in the early months of the pandemic. Between January and March of 2020, the number of telehealth visits (among four large but non-representative providers) increased by 50% in comparison to the same time frame in 2019. Not surprisingly, emergency departments also saw a sharp decline in visits during the first quarter of 2020 (Koonin et al., 2020). Figure 2 presents the number of telemedicine visits among Phreesia (a health-care technology company) providers, demonstrating that visits dramatically increased in mid-March, began to decline in April, and seemed to level off during June and July (Mehrotra et al., 2020). While the share of telemedicine visits remained above pre-pandemic levels at the end of the study period, the plateau could indicate a return (with COVID-19 restrictions) to in-person visits as COVID-19 policies become standardized.

#### FIGURE 2



Number of Telemedicine Visits per Week on the Phreesia Technology Platform



While the use of telemedicine has greatly increased since the start of the pandemic, pre-COVID research indicates that segments of the population are likely finding it difficult to obtain such services. While access to telemedicine in rural areas has increased, prior to the pandemic it was an underused resource for SUD treatment partly due to limited access to the internet (Creedon et al., 2020). For example, one study in Michigan found that 3% of residents in urban areas and 40% of residents in rural areas did not have access to high-speed broadband (American Academy of Family Physicians, 2020).

# Addressing the Opioid Crisis During the Pandemic

#### MEDICATION-ASSISTED TREATMENT : EVIDENCE-BASED BUT UNDERUTILIZED

Experts consider medication-assisted treatment (MAT) the gold standard in effective treatment for those with OUDs (Crime Solutions, n.d.; Mittal et al., 2017). Specifically, research has found that retention in buprenorphine and methadone treatment programs increases rates of opioid abstinence and reduces by half the mortality rate among those with an OUD (Fudala et al., 2003; Krupitsky et al., Mattick et al., 2009; Sordo, 2017; Weiss et al., 2011; Woody et al., 2008). Despite such statistics, its utilization has remained low. Prior to the start of the pandemic, an estimated 10% of people in need of opioid treatment were receiving MAT (Berk, 2019). One explanation for this gap is the heavy regulation of medications used to treat opioid use disorders; other possibilities include inadequate clinical training, stigma, a shortage of addiction specialists, a lack of clinical training to provide MAT and financial barriers (National Academies of Sciences, Engineering, and Medicine, 2018).

To address some of the financial barriers to MAT, Congress passed the SUPPORT Act in 2018, which expanded Medicare coverage to patients in certified opioid-treatment programs and required temporary coverage of MAT for patients with Medicaid (ICANotes Behavioral Health HER, 2019). Despite this legislation, challenges remain. In 2019 less than 7% of physicians had Drug Enforcement Authority (DEA) waivers. As a result less than half of U.S. counties have at least one physician with a waiver to prescribe buprenorphine (Fiscella & Wakeman, 2019).

## **TELEMEDICINE AND MAT**

While more rigorous research is needed, a recent but pre-pandemic systematic review of telemedicine interventions for SUD found them to be an effective alternative to in-person treatment (Lin et al., 2019). While this finding is promising, pre-pandemic use of telemedicine for patients with OUD was quite low. In an analysis of claims from a large commercial insurer between 2010 and 2017, only 0.1% of substance use disorder visits occurred via telemedicine (Huskamp et al., 2018).

At the start of the pandemic, however, many health care and treatment providers worked to quickly transition to telemedicine in order to ensure continuity of care. In order to facilitate this transition, regulations and restrictions related to prescribing Medications for OUDs (MOUDs) were relaxed. On March 16,2020, the Secretary of Health and Human Services, in collaboration with the DEA, implemented an exception to the 2008 Ryan Haight Act, allowing physicians to prescribe controlled substances via telemedicine. Prior to this change, The Haight Act restricted providers from prescribing any controlled substances (e.g., buprenorphine) without first completing an in-person evaluation. In March 2020, the DEA announced policy changes to address prescribing restrictions for individuals with OUDs. Under the changes, DEA-registered practitioners may prescribe controlled substances via telehealth appointments, and physician evaluations may be conducted telephonically for existing and new patients seeking a buprenorphine prescription for OUD treatment.

In March of 2020, SAMSHA relaxed regulations and exempted Outpatient Treatment Programs from requiring in-person physical exams with physician approval. However, this exemption does not apply to new patients receiving methadone. According to SAMSHA, exempting new methadone patients from in-person medical examinations presents a "significant issue" related to determining the appropriate treatment dosage (Substance Abuse and Mental Health Services Administration, 2020a). The new regulatory framework means that while existing patients identified as stable may take home 28 days of methadone (for less stable patients, the supply may be limited to 14 days), new patients or those in short-term or interim treatment remain ineligible to take home any amount of methadone (Priest, 2020).

There is emerging evidence to demonstrate the benefits of relaxing federal regulations and expanding the use of telemedicine for OUD treatment. For example, a Rhode Island outpatient addiction treatment facility found that after transitioning from in-person to telehealth services during the pandemic, their intake appointment completion rates increased from 50% to 69%. Additionally, follow-up visits via telehealth appointments provided greater flexibility, reduced concerns regarding stigma, and reduced burdens related to drug screening, findings that were perceived to contribute to increased patient retention rates (Stringer et al., 2021). While adjusting federal regulations was vital for ensuring access to SUD-related services and treatment during the pandemic, these changes did not necessarily facilitate admission of new patients or guarantee continuity of treatment for existing patients. Interviews with clinicians authorized to prescribe buprenorphine found that while most were able to transition quickly to telemedicine and reported serving new patients, some reported reservations about bringing in new patients. One reason for the hesitation was the absence of a prior clinical-patient relationship. Furthermore, an analysis of medical claims associated with MOUDs found that while prescriptions for individuals with recent (prior) MOUDs in 2020 were similar to those in 2019, the proportion of prescriptions for individuals without recent MOUDs dropped for several weeks, eventually returning to 2019 proportions by the end of the study period (week 13). One possible interpretation

from these findings is that the individuals already receiving treatment at the start of the pandemic were able to maintain or continue treatment, whereas newer patients were less likely to be admitted into treatment in 2020 (Huskamp et al., 2020).

While the findings showing an increase in medications for existing OUD patients should be viewed as a measured success, a report by the Addiction Policy Forum found that 34% of respondents said they had experienced disruptions in accessing treatment or recovery

#### FIGURE 3



#### Proportion of People Without Recent MOUD Receiving an OUD Medication

support services due to COVID-19, and 14% reported being unable to receive any needed services (Husley et al., 2020).

While the picture remains incomplete, the available research seems to indicate that people who had pre-existing OUDs and no recent involvement in treatment, as well as those who have developed an OUD since the beginning of the pandemic, may face greater barriers to accessing treatment and medication. Recognizing this, states are developing strategies to directly address the need to connect new patients to treatment during the pandemic. For example, in an effort to support provision of MOUDs (specifically buprenorphine) to those seeking new services, the Rhode Island Department of Health, in collaboration with the Department of Behavioral Health, Developmental Disabilities, and Hospitals, established a 24-hour hotline to serve as a "tele-bridge" to connect people with a clinician able to conduct an assessment; prescribe buprenorphine where appropriate; and provide a prescription for naloxone, referral to community and behavioral health support services, and harm-reduction information. Within the first five months, 93 calls were received and 74 resulted in a new buprenorphine prescription (Clark et al., 2021).

## **EFFORTS TO ADDRESS OPIOID OVERDOSE RISK**

Given the availability of evidence-based treatments for effectively reducing opioidrelated overdoses, the rising number of fatal opioid overdoses both prior to and during the pandemic is cause for concern. To address the accelerating rate of opioid overdose events, states, local agencies, and non-profit organizations are working to develop new policies or adapt measures in place before the pandemic. These changes have relaxed prescribing requirements for naloxone (an opioid antagonist medication that quickly reverses an opioid overdose), modified traditional outreach efforts, and created smartphone and web-based forums to facilitate naloxone delivery and provide information on treatment facilities, services, and educational resources.

Prior research has shown that targeted naloxone distribution can reduce the likelihood of an opioid overdose becoming fatal, but requires training and equipping people who are likely to experience an overdose or come into contact with someone at risk of overdose (e.g., person with OUD, family, friend, community member, or first responder) (Carroll et al., 2018). The role of community members and those in close contact with at-risk individuals cannot be overstated. A 2010 nationwide study showed that over 80% of overdose reversals using naloxone were administered by individuals also reported to use drugs (Centers for Disease Control and Prevention, 2012).

In an effort to adapt, some harm-reduction organizations, with state collaboration and support, have launched in-person delivery and mail-based services (Collins et al., 2020a). This includes NEXT Distro, a non-profit organization that partnered with Delaware's Division of Public Health to send naloxone to people free-of-charge (Cherry, 2020). By the

time COVID-19 arrived in the U.S., most states had either issued standing orders to allow pharmacies to dispense naloxone, or had established medical protocols or collaborative practice agreements to allow for the provision of naloxone without a prescription (Sharpless, 2019; The Network for Public Health Law, 2019). But as with other opioidrelated treatment and services, naloxone-related services and resources have also been significantly disrupted by the pandemic. For example, community-based organizations focused on harm-reduction and education often rely on publicly accessible buildings and areas (e.g., parks) to connect with community members. The closure of such areas has therefore created greater barriers for these community efforts. Community outreach strategies to connect people with services and distribute naloxone and clean syringes have also been significantly disrupted (Collins et al., 2020a; Glick et al., 2020).

While there have been adaptations to existing practices and policy to address the gaps in treatment access during the pandemic, and some newer approaches have been implemented or expanded, the overdose rates during the pandemic have continued to climb, emphasizing the gap in need and receipt of services. As mentioned earlier, the opioid overdose crisis continues to fall disproportionately on communities of color, especially Black individuals. Delaware has seen a record number of overdose deaths in 2020 and community-based efforts can be found in a handful of cities, including Wilmington, a predominantly Black community.

Prior to the pandemic, New Castle County (in which Wilmington is located) implemented a Community Naloxone Initiative led by the Division of Public Health. Initiative-led events provided those who attended with 15-minute trainings and a kit with two doses of naloxone (Delaware.gov, 2019b). Such events have continued during the pandemic. Overdose prevention efforts are also supported by Brandywine Counseling, which has partnered with an emergency room doctor to walk through Wilmington neighborhoods, meeting and speaking with community members and distributing overdose reversing kits that include naloxone. As many as 150 kits, which include information on where to seek treatment, are delivered during each outing (Schmidt, 2020).

While these efforts represent evidence-based practices, there remains unmet need for expanded culturally informed prevention and education efforts across the county. One key component of successful community engagement, particularly in predominantly Black communities, is the use of interpersonal relationships and one-on-one connections (Substance Abuse and Mental Health Services Administration, 2020b). Such interpersonal connections are challenging to establish and expand during a pandemic, however, and the need to innovate and adapt pre-COVID policies and practices remains.

### EFFORTS TO ADDRESS OPIOID OVERDOSE RISK AMONG JUSTICE-INVOLVED INDIVIDUALS

With more than half of the people in state prison and two-thirds of those in jail meeting the criteria for drug abuse or dependence established by the Diagnostic and Statistical Manual of Mental Disorders -V, justice-involved individuals are in great need of treatment. They are also at risk for an overdose during the reentry process, a risk that is particularly acute for those with an OUD (Binswanger et al., 2013; Bronson et al., 2017; Pizzicato et al., 2018). Corrections officials face challenges in meeting the treatment needs of those incarcerated during COVID-19 and providing continuity of care for those released rapidly as a coronavirus mitigation measure.

The Franklin County Sheriff's Office (FCSO) in Greenfield, MA, provides one example of how jail policies and procedures can be adapted to help address these challenges (Donelan et al., 2021). Just one day after Massachusetts declared a pandemic, the FCSO implemented a variety of COVID-19 safety regulations, such as requiring mask-wearing, restricting access to the jail, curtailing visitation, relocating certain incarcerated individuals to reduce density, and redesigning spaces to accommodate limits on the number of people permitted per room. In addition to these changes, the FCSO adapted its OUD-treatment policies, administering medicine in jail cells instead of in groups and replacing behavioral health group meetings with independent work via workbooks. The FCSO was also able to repurpose funding to provide distressed individuals with psychosocial telehealth services.

The rapid release of individuals from the jail presented a particular challenge for the provision of care, as approximately 41% of those released were receiving OUD treatment. FCSO officials adapted a hub-and-spoke OUD treatment model, utilizing telehealth to connect caseworkers with community-based treatment providers. In order to ensure continuity of care, staff advocated for the Massachusetts Medicaid system to make adjustments enabling individuals to continue to receive healthcare coverage while detained. Those who were previously enrolled in Medicaid were permitted reactivation without documentation. FSCO also adapted the post-release reentry program to use telehealth services, telehealth groups, and a mobile phone texting application to ensure continuity of care. Most notably, FCSO provided "take-home" MOUD (e.g., methadone) when people were released from jail, which was not a common practice in other jurisdictions (Donelan et al., 2021).

While these efforts appear promising, the impact will not be fully known until more research can be conducted. However, the FCSO is providing training to other jail operators on the requirements associated with OTP certification in an effort to support the expansion of OUD treatment behind bars.

# Conclusion

In 2020, the public health field, already struggling with an opioid epidemic recognized as a national emergency two years earlier, was confronted by a new crisis: the coronavirus pandemic. In response, health care providers worked to transition from in-person to virtual care, while federal and state governments relaxed regulations to facilitate remote treatment. Despite these measures, data indicates the pandemic increased substance use and the corresponding need for treatment, in particular for those with OUDs at risk of an overdose. This was especially true for some residing in poor communities of color who had not previously received treatment.

While there were initial disruptions in treatment, early findings indicate that many existing SUD patients were able to continue their care. Unfortunately, measures to date have not adequately addressed the needs of new patients, or the risks they face. Harm reduction and outreach efforts for those with OUD remain crucial to support vulnerable and increasingly isolated communities. Strategies must also be enhanced with culturally competent interventions that engage currently underserved populations. While more information and research is needed to fully understand the impact of pandemic-related policy changes, a movement is underway to ensure strategies that proved successful endure beyond the era of COVID-19 (Frank 2021; Krawczyk et al., 2020; Stringer et al., 2021; Wang et al., 2021).

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